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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,692	05/14/2001	Naoki Abe	040373/0303	6572
22428	7590	09/19/2006	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			LOFTIS, JOHNNA RONEE	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/853,692	Applicant(s) ABE ET AL.	
	Examiner Johnna R. Loftis	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a non-final office action upon examination of application number 09/853,692. Claims 1, 2 and 14 are pending and have been examined on the merits discussed below.

Response to Arguments

2. Applicant's arguments, with respect to the rejection(s) of claim(s) 1 and 2 under 35 USC 102(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chen and Chen. Regarding increasing and decreasing the price at different time intervals, Chen and Chen show varying pricing at different time intervals, page 147, table 2. Based on this, it would have been obvious to raise and lower the pricing at different time intervals to compare profits. Previous rejections have been modified below.

3. Regarding newly added claim 14, Herz et al has been introduced to show a system wherein on-line or off-line product offers are customized to different customers in an attempt to maximize a vendor's profits.

4. Previous rejection under 35 USC 112 has been withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen and Chen, "The Optimal Penetration Pricing Strategy Model Under the Dynamic Demand Function".

As per claim 1, Chen and Chen teaches at each point in time, carrying out marketing for fixed time intervals using prices that vary from an optimal price estimate at that time; comparing profits obtained as a result of said marketing; updating the optimal price estimate at time in question in a direction of a price at which greater profit was obtained; and repeating said marketing step, said comparison step, and said updated step (page 144 – relation between price, quantity and demand is analyzed; at higher price actual number purchased lowers, whereas at a lower price actual number purchased raises; table 2, page 147, at different time periods the price is changed which effects the demand of the product. The demand of the product inherently correlates to profits made, such that, low demand results in lower profit, higher demand results in higher profit; page 148 and 149, penetration pricing strategy is used, in order to increase sales quantity a manufacturer keeps the unit selling price of a product equal to its cost during an introduction stage, then sensitivity analysis is used to analyze optimal solution to see effects of variation of parameters on optimal pricing and total profit; page 150, variation in promotion period and unit cost affects maximization of total profits and affects manufacturers decision making about the optimal pricing of a product). While Chen and Chen does not explicitly teach raising *and* lowering the price at different time intervals, it would have been obvious based on the teaching of Chen and Chen that the price could be lowered as well as raised to determine the effect on demand (profit), by lowering the price, one could determine if the increase in demand would make up for the lowered price such that profits would increase. Lowering *and* raising

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prices in Chen and Chen would produce more accurate calculations of change in demand thereby increasing or decreasing profits.

As per claim 2, Chen and Chen teaches said step size is determined by raising the number of past marketing time intervals to minus α power, where α is a positive number that is less than 1 (see pages 145 and 150 – the time interval (or promotion period) is a decreasing function of time t . note: in applicants specification, I to the minus alpha power is equated to delta, which is a decreasing function of the trial number.).

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen and Chen, further in view of Herz et al, US 2001/0014868.

As per claim 14, Chen and Chen teach all the limitations as applied to claim 1 above, but does not explicitly teach a first set of web users a provided with marketing over the internet at the price that is one step size higher than the optimal price estimate at that time, and wherein a second set of web users are provided with marketing over the internet at the price that is one step size lower than the optimal price estimate at that time, with no web user being in both the first set of web users and the second set of web users. Herz et al teaches on-line or off-line product offers are customized to different customers in an attempt to maximize a vendor's profits (paragraph 0037) and wherein offers can include higher or lower effective prices (end paragraph 0073). It would have been obvious to one of ordinary skill in the art to modify Chen and Chen to include marketing over the Internet as taught in Herz et al as a way to distribute the offers of lower and higher prices to determine the effect on profit. By including the Internet marketing

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within Chen and Chen, one would result in a more accurate determination of profits received by the change in the price at different time intervals thereby resulting in a more efficient system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnna R. Loftis whose telephone number is 571-272-6736. The examiner can normally be reached on M-F 8am-4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL

9/13/06




C. Michelle Tarae
Patent Examiner
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